



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/500,624	02/09/2000	Dean Amburn	AMB 0101 PA	2881
27572	7590	12/16/2004	EXAMINER	
HARNESS, DICKEY & PIERCE, P.L.C. P.O. BOX 828 BLOOMFIELD HILLS, MI 48303			DASS, HARISH T	
			ART UNIT	PAPER NUMBER
			3628	

DATE MAILED: 12/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.



## Office Action Summary

**Application No.**

09/500,624

**Applicant(s)**

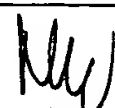
AMBURN, DEAN

**Examiner**

Harish T Dass

**Art Unit**

3628



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 August 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-46 is/are pending in the application.
- 4a) Of the above claim(s) 1-29, 34 and 36 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 30-33, 35 and 37-46 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.



### **DETAILED ACTION**

Claims 1-29, 34 and 36 are withdrawn.

#### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claim 30 and 44-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lupien et al (hereinafter Lupien - US 5,845,266) in view of Tertitski et al (hereinafter Tertitski - US 6,493,681).**

Re. Claim 30, Lupien discloses receiving from a client of the network accessible brokerage at least one computer implemented decision model (satisfaction density) for the security wherein the decision model comprises a mathematical function for receiving data and providing at least one value wherein the at least one value is compared to a decision point for deciding to buy or sell the security, and inputting data into the decision model [see entire document particularly, Abstract; C1 L24-L64; C4 L19-L36; C6 L29-L54], in response to monitoring said decision model, automatically generating a sell transaction order for the security, and automatically transmitting the sell transaction order to the market computer [C6 L14-L54; C8 L5-L15, wrap the profile], and in response to monitoring said decision model, automatically generating a buy transaction



order for the security, and automatically transmitting the buy transaction order to a market computer [ C4 L18-L60]. Lupien does not explicitly disclose computer implemented monitoring the decision model for the decision to buy the security wherein monitoring the decision model comprises comparing the at least one value to the decision point. However, Tertitski discloses these steps [Abstract; Figures 2-5; C1 L20 to C2 L47; C3 L10 to C4 L10; C4 L50 to C5 L32; claims] to provide day trade recommendation using formula, calculation and best strategy. Therefore, it would be obvious to one ordinary skill in the art at the time the applicant's invention was made to modify the disclosure of Lupien and include monitoring, decision model for decision to buy securities and comparison, as disclosed by Tertitski, to provide buy, sell or hold recommendation of securities.

Re. Claims 44-46, Lupien discloses at least one client computer (terminal) in communication with the automated trading system via the network wherein the client computer is operated by a client computer user [Abstract; Figure 1; C1 L24-L64; C6 L14-L54; C8 L5-L15], and at least one computer implemented decision model for deciding whether to buy or sell a security wherein the decision model comprises, wherein the at least one decision model enters a state comprising a buy state and a sell state [Abstract; C1 L24-L64; C4 L19-L36; C6 L29-L54], and a data input processor for receiving data from a data source and inputting the data into the decision model [C4 L19-L28], and a computer implemented transaction approval processor for determining if a transaction to buy or sell the security is appropriate if the at least one decision



Art Unit: 3628

model enters the buy state and/or the sell state [C1 L24-L64; C6 L14-L54; C8 L5-L15], and a computer implemented transaction submission processor for submitting a transaction to buy or sell the security if approved by the transaction approval processor, wherein the decision monitor continuously monitors the at least one decision model and the security is repeatedly bought and sold based on the state of the at least one decision model and the determination of the transaction approval processor [C1 L24-L64; C6 L14-L54; C8 L5-L15; C6 L34 to C7 L5; C14 L52-L61], and wherein the logic of the decision model is defined by the user [C1 L24-L64; C6 L14-L54; C8 L5-L15; C6 L34 to C7 L5; C14 L52-L61], and wherein the logic of the decision model comprises a moving average [C1 L24-L64; C6 L14-L54; C8 L5-L15; C6 L34 to C7 L5; C14 L52-L61]. Lupien, does not explicitly disclose a computer implemented decision monitor for monitoring the state of the at least one decision model and mathematical function for receiving data and providing at least one value wherein the at least one value is compared to a decision point for deciding to buy or sell the security, However, Tertitski discloses these step [Abstract; Figures 2-5; C1 L20 to C2 L47; C3 L10 to C4 L10; C4 L50 to C5 L32; claims] to provide day trade recommendation using formula, calculation and best strategy. Therefore, it would be obvious to one ordinary skill in the art at the time the applicant's invention was made to modify the disclosure of Lupien and include monitoring, decision model for decision to buy securities and comparison, as disclosed by Tertitski, to provide buy, sell or hold recommendation of securities.



Art Unit: 3628

**Claims 31-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lupien and Tertitski, as applied to claim 30 above, and further in view of (Kane (US 6,317,728).**

Re. Claims 31-33, Lupien discloses canceling the sell order if the decision model indicates a trade is undesirable [C11 L1-L22; C19 L22-L40]. Lupien, does not explicitly disclose wherein the step of generating a transaction order comprises after the step of generating a sell order, monitoring the sell order until the order is filled, monitoring the decision model, after the step of transmitting the buy transaction order to the market computer, confirming the buy transaction, initiating a floating loss, and monitoring the floating stop loss for a stop loss decision to sell the security, and if a stop loss decision to sell is reached then automatically transmitting a stop loss sell transaction order for the security to the market computer, and floating stop loss comprises a dynamic stop loss. However, after the step of transmitting the buy transaction order to the market computer and confirming the buy transaction, initiating a floating loss are known.

Further Tertitski discloses monitoring the decision model, monitoring the floating stop loss for a stop loss decision to sell the security, and if a stop loss decision to sell is reached then automatically transmitting a stop loss sell transaction order for the security to the market computer [Abstract; Figures 2-5; C1 L20 to C2 L47; C3 L10 to C4 L10; C4 L50 to C5 L32; claims] to provide day trade recommendation using formula, calculation and best strategy. Additionally, Kane discloses wherein the step of generating a transaction order comprises after the step of generating a sell order, monitoring the sell



Art Unit: 3628

order until the order is filled and floating stop loss comprises a dynamic (continuously) stop loss [C4 L66 to C5 L56; C1 L46 to C3 L62; C18 L20-L55; claim 30] to execute buy and sell orders in conformance with the buy/sell rules. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the disclosure of Lupien and include step of generating order and monitoring the decision model, monitoring the floating stop loss, as disclosed by Tertitski and Kane, to trade securities based of sound decision model and rules.

**Claims 35 and 37-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lupien in view of Kane (US 6,317,728) and Buist (US 6,408,282).**

Re. Claim 35, Lupien discloses receiving at least one computer implemented buy decision model for the security, and receiving at least one computer implemented sell decision model for the security, and providing a computer implemented monitoring process for monitoring (observing) the decision models for a buy decision and/or a sell decision [Lupien – Abs; C1 L24-L64; C4 L19-L65; C8 L5-L59], and providing a computer implemented transaction approval process for determining if a transaction to buy or sell the security is appropriate [Lupien – Abs (accommodates stock exchange rules)], and providing a computer implemented transaction submission process for submitting a transaction to buy or sell the security to a market computer system and monitoring the transaction until it is completed [C8 L5-L15; C11 L1-L21], and inputting data into the buy decision model and the sell decision model wherein the data comprises data for the



Art Unit: 3628

security [C7 L15-L23], and if the buy decision is reached then determining through the transaction approval process if a buy transaction is appropriate and if so then automatically submitting through the transaction submission process an order to buy the security [C8 L5-L15; C11 L1-L21], and if the sell decision is reached then determining through the transaction approval process if a sell transaction is appropriate and if so then automatically submitting through the transaction submission process an order to sell the security [C8 L5-L15; C11 L1-L21], and continuing inputting data into the decision models, monitoring the decision models through the monitoring process, and repeating the steps if the buy decision is reached or the sell decision is reached until the process is stopped [Lupien- C14 L39-L67], and the transaction submission process, the buy decision model, and the sell decision model [C8 L5-L15; C11 L1-L21]. Lupien, explicitly, does not disclose monitoring the decision models through the monitoring process for the buy decision and/or the sell decision, providing a brokerage having a broker computer system for transacting orders to buy and sell securities, wherein the brokerage computer system is in communication with a plurality of client computer systems, receiving to the brokerage computer system from the client computer system, providing a computer implemented transaction approval process on the brokerage computer system for determining after the decision to buy and/or sell the security is made, and market computer system and wherein the data is input into the decision model at the brokerage computer system. However, Kane discloses a securities and/or commodities trading system (Intra-Day trading system), based on the principles of artificial intelligence, that includes a computer arrangement communicating with a



securities exchange, and has inputs for receiving buy and sell data and input communicating with the decision logic for executing buy and sell orders in conformance with the buy/sell rules, monitoring the decision models through the monitoring process for the buy decision and/or the sell decision and providing a computer implemented transaction approval process on the brokerage computer system (Fig. 1 device connected to # 20) for determining after the decision to buy and/or sell the security is made (execution logic with an executing logic the affirmed buy short order and transaction based on recommendations) and E-Trade [Kane – see entire document particularly, Abstract; C1 L20 to C3 L51; C5 L1-L65; C7 L17-L67; C10 L65 to C11 L60; claim 8 (decision models = agents)] to monitor the performance of transaction to minimize the risk. Further, Buist discloses computer-aided trading of financial instruments, trading of securities over the Internet, collecting, receiving, disseminating or displaying system orders, executing system orders and providing a brokerage having a broker computer system (Fig. 1 # 42; C6 L25-L32) for transacting orders to buy and sell securities, wherein the data is input into the decision model (trade-decision-making) at the brokerage computer system [C1 L13 to C3 L63; C6 L25-L32], wherein the brokerage computer system is in communication with a plurality of client computer systems (Fig. 1 # 10) operated by a plurality of (unrelated) clients [see entire document particularly, Figures 1 (# 10, 42, 55, 12, 44), 2-3; 21 (# 2110, 2180), 22 (# 2210, 2265), 25; C1 L56-67; C2 L1-L3, L38-L45; C3 L1-L5, L15-16; C6 L25 to C9 L5; C31 L48-L66; Claim 1], receiving to the brokerage computer system (Fig. 1 # 42) from the client computer system (Fig. 1 # 10) [Fig. 1 # 12 connections], market computer system [Fig.



1 # 55] to provide Internet based securities trading system. It is known that the broker's job is to monitor the market whether it is in person or computerized monitoring tools to watch the market trend. Further, decision of trading securities is a function of the client to set the rules for buying/selling, either he/she has to enter the parameters into computer or explain it to his/her broker (authorize broker) and communicate his/her decision to broker (agent) to finalize the deal. Therefore, it would be obvious to one of ordinary skill in the art at the time the applicant's invention was made to modify the disclosure of Lupien and include monitoring the decision models through brokerage network, and describe the system architecture of on-line (Internet or day-trading) as disclosed by Kane and Buist, to provide system view and system monitoring capability using user interface (GUI) or automatic evaluating decision logic to monitor a portfolio of stocks in real time which can shield an investor from loss while maximizing gain.

Re. Claim 37, Lupien discloses b. accepting one or more computer implemented decision models for a security wherein the one or more decision models comprise logic for deciding to buy the security and logic for deciding to sell the security [Lupien: Abs; Fig. 1-2, 4-7, 11; C1 L24-L64; C2 L45-L65; C3 L23-L36; C4 L18 to C5 L34; C6 L L29-L65; C8 L5-L59; C11 L12-L21; C14 L53-L61; C19 L3-L45 = Ref-to-Lupien], and d. providing a computer implemented transaction approval process for determining if a transaction to buy or sell the security is appropriate once the decision to buy or the decision to sell has been made [see Ref-to-Lupien above], and e. providing a computer implemented transaction submission process for submitting the transaction to buy or



Art Unit: 3628

sell the security to a market computer system and monitoring the transaction until it is completed [Ref-to-Lupien above], and f. inputting data into the one or more decision models, wherein the data is input into the one or more decision models until the process is stopped [see Ref-to-Lupien above], and h. if the decision to buy or the decision to sell is reached then determining using the transaction approval process if a buy or sell transaction is appropriate and if so then automatically submitting using the transaction submission process an order to buy or sell the security [see Ref-to-Lupien], and h. iteratively repeating above steps f. and g. until the process is stopped [see Ref-to-Lupien above; C6 L34 to C7 L5; C14 L52-L61]. Lupien, explicitly, does not disclose providing a computer implemented monitoring process for monitoring the one or more decision models for a decision to buy the security and/or a decision to sell the security; monitoring the one or more decision models using the monitoring process, for the decision to buy and/or the decision to sell; providing a network accessible brokerage comprising a broker computer system; brokerage computer system from the client; providing on brokerage computer system. However, Kane discloses these steps: providing a computer implemented monitoring process for monitoring the one or more decision models (agents) for a decision to buy the security and/or a decision to sell the security [Kane US 6,317,728 – see entire document particularly, Abs; C1 L20 to C3 L51; C5 L1-L65; C7 L17-L67; C10 L65 to C11 L60 = Ref-to-Kane], and monitoring the one or more decision models using the monitoring process, for the decision to buy and/or the decision to sell [see Ref-to-Kane above] to monitor the performance of transaction to minimize the risk. Further, Buist discloses computer-aided trading of financial



Art Unit: 3628

instruments, trading of securities over the Internet, collecting, receiving, disseminating or displaying system orders, executing system orders and a. providing a network accessible brokerage comprising a broker computer system [figure 1, # 12, 44 & 42]; the brokerage computer system (Fig. 1 #42) from the client (Fig. 1 # 10); providing on brokerage computer system (Fig. 1 3 42) [C1 L56-67; C2 L1-L3, L38-L45; C3 L1-L5, L15-16; C6 L25 to C9 L5; C31 L48-L66; Claim 1] to provide Internet based securities trading. Therefore, it would be obvious to one ordinary skill in the art at the time the applicant's invention was made to modify the disclosure of Lupien and include monitoring the decision models through brokerage network, as disclosed by Kane and Buist, to provide trading network and decision agent to monitor a portfolio of stocks in real time which can shield an investor from loss while maximizing gain.

Re. Claims 38-39, Lupien discloses wherein the decision model comprises a moving average calculation of at least a portion of the data [see Ref-to-Lupien above (average price=aggregate average price)], and wherein the decision model comprises a weighted data process [see Ref-to-Lupien; C2 L62-L67; C23 L1-L20].

Re. Claims 40-43 Lupien, explicitly, does not disclose after the steps of submitting an order to buy the security and monitoring the transaction until it is completed, automatically initiating a floating stop loss process for selling the security wherein either the floating stop loss process or the decision model can reach a decision to sell the security, and wherein the floating stop loss is a dynamic floating stop loss, and the step



Art Unit: 3628

of validating the data before the step of inputting the data into the decision model, and further comprises logic to sell short the security and logic to buy to cover the security. However, Kane discloses these steps: after the steps of submitting an order to buy the security and monitoring the transaction until it is completed, automatically initiating a floating stop loss (stop loss order) process for selling the security wherein either the floating stop loss process or the decision model can reach a decision to sell the security, and wherein the floating stop loss is a dynamic (monitoring stocks continuously) floating stop loss [see Ref-to-Kane above; C2 L22-L34], and the step of validating the data before the step of inputting the data into the decision model [see Ref-to-Kane above; C7 L34-L67; C13 L25-L65], and further comprises logic to sell short the security and logic to buy to cover the security [see Ref-to-Kane above; C3 L20-L58]. Therefore, it would be obvious to one ordinary skill in the art at the time the applicant's invention was made to modify the disclosure of Lupien and include stop loss, validating, and selling short to protect oneself from loss and make money on the way up and more on the way down.

### ***Response to Arguments***

2. Applicant's arguments with respect to pending claims have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

3. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP



Art Unit: 3628

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Applicant is required under 37 CFR ' 1.111 (c) to consider the references fully when responding to this action.

Tradetrek.com, 03/03/2000 "Fundamental Analysis" Web page analyzes and generates P/E ratio - 1 page.

Tradetrek.com, 2/19/2000 "Day Trading Strategies" show stop-loss trading - 3 pages.

Trade Now Daily Bulletine, 1999 shows the stop-limit trading.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Harish T Dass whose telephone number is 703-305-4694. The examiner can normally be reached on 8:00 AM to 4:50 PM.




Art Unit: 3628

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hyung S Sough can be reached on 703-308-0505. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Harish T Dass  
Examiner  
Art Unit 3628

12/3/04

  
HYUNG SOUGH  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600